

REMARKS

The Office Action has been carefully reviewed in light of the Office Action dated April 2, 2004. Claims 1, 11, 12, 19, and 22 have been amended. Claims 1-46 remain pending in this application. Applicants reserve the right to pursue the original claims and/or any canceled claims in this application and in other applications.

Claims 1-4, 9-17 and 19-24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Meade et al. (WO 99/64243). Further, claims 25, 28-31, 36 and 39-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meade. Applicants respectfully traverse the rejection and request reconsideration.

As amended herein, claims 1, 11 and 13 all recite the limitation of a coating apparatus for applying a coating liquid to a printing substrate, comprising *inter alia* “a bypass mechanism for controlling the path through which the printing substrate passes.”

As amended herein, claims 12 (an ink jet printer), 19 and 22 (a combination for use in a coating apparatus for applying a coating liquid to a coating substrate) also recite the limitation of “a bypass mechanism for controlling the path through which the printing substrate passes.”

Claim 25 recites a metering device for providing a layer of coating liquid to a coating apparatus wherein the coating apparatus has a rotatable first roll and a rotatable second roll defining with the first roll a first nip through which a printing substrate passes, comprising *inter alia* “a doctor blade for metering a layer of coating liquid onto the second roll, the doctor blade having a distal edge with a surface energy that contacts the second roll, wherein the surface energy of at least a portion of the distal edge is less than the surface energy of the coating liquid.”

Claim 36 recites a metering device for providing a layer of coating liquid to a coating apparatus wherein the coating apparatus has a rotatable first roll and a rotatable second roll defining with the first roll a first nip through which a printing substrate passes, comprising:

- a. a rotatable third roll having a surface energy;
- b. a supply of coating liquid having a surface energy, the supply of coating liquid being in contact with the third roll; and
- c. a doctor blade for metering a layer of coating liquid onto the third roll, the doctor blade having a distal edge with a surface energy that contacts the third roll,
wherein the surface energy of at least a portion of the third roll is less than the surface energy of the coating liquid.

Meade discloses that an ink jet printer (10) is provided comprising a housing (30), an ink jet printing apparatus (20) and a coating apparatus (60). The ink jet printing apparatus (20) is located within the housing (30) and includes an ink jet printing device (22) capable of ejecting ink droplets onto a first side of a printing substrate (12) which moves through the housing (30) along a printing substrate feed path. The coating apparatus is positioned along the printing substrate feed path and spaced from the printing device (22). The coating apparatus (60) applies a substantially uniform layer of coating material onto at least a portion of the first side of the printing substrate (12).

Meade fails to teach or suggest all of the limitations of claims 1, 11-13, 19 and 22. Specifically, Meade fails to teach or suggest “a bypass mechanism for controlling the path through which the printing substrate passes.” For at least this reason, the rejection of claims 1, 11-13, 19 and 22 should be withdrawn.

Claims 2-10 depend from claim 1, claims 14-18 depend from claim 13, claims 20 and 21

depend from claim 19, claims 23 and 24 depend from claim 22, and are allowable along with claims 1, 13, 19 and 22 respectively, for the reasons mentioned above and on their own merit.

The Office Action fails to establish a *prima facie* case of obviousness for the subject matter of claims 25, 28-31, 36 and 39-42. The Court of Appeals for the Federal Circuit has held that "a *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993), quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). However, the mere fact that the prior art may be modified in the manner suggested by the Examiner neither makes the modification *prima facie* obvious nor obvious unless the prior art suggests the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). *See also In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) ("the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggest the desirability of the combination."); *In re Geiger*, 815 F.2d at 688, 2 USPQ2d at 1278 (Fed. Cir. 1987) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.") (citing *ACS Hospital Systems, Inc. v. Monteffore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

In the present case, Meade fails to teach or suggest the subject matter of claim 25, "a doctor blade for metering a layer of coating liquid onto the second roll, the doctor blade having a distal edge with a surface energy that contacts the second roll, wherein the surface energy of at least a portion of the distal edge is less than the surface energy of the coating liquid." Meade

also fails to teach or suggest the subject matter of claim 36, a rotatable third roll having a surface energy, a supply of coating liquid having a surface energy, the supply of coating liquid being in contact with the third roll and a doctor blade for metering a layer of coating liquid onto the third roll, the doctor blade having a distal edge with a surface energy that contacts the third roll, wherein the surface energy of at least a portion of the third roll is less than the surface energy of the coating liquid. The Office Action acknowledges that Meade fails to specifically disclose “the surface energy of the coating liquid to the printing substrate.” Additionally, Meade fails to teach the relationship between the surface energy of the coating liquid and the distal edge of the doctor blade (as claimed in claim 25) and the third roll (as claimed in claim 36). Meade discloses that “[p]referably, the second roll 64 is formed from a material having a surface energy which allows the liquid coating material to sufficiently spread out on its outer surface 64a such that a substantially uniform layer of coating material 100 is applied by the second roll 64 to the substrate 12.” See page 5, lines 17-20.

Further, Meade fails to teach or suggest the subject matter of claim 25 because Meade uses the surface energy of the second roll and not the surface energy of at least a portion of the distal edge. Meade also fails to teach or suggest the subject matter of claim 36 because Meade uses the surface energy of the second roll and not the surface energy of the third roll. Accordingly, the rejection of claims 25 and 36 should be withdrawn.

Claims 28-31 depend from claim 25. Claims 39-42 depend from claim 36. Claims 28-31 and 39-42 are allowable along with claims 25 and 36, respectively, for the reasons mentioned above and on their own merit.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Meade in

view of Chiang et al. (U.S. Patent No. 6,451,438). Applicants respectfully traverse the rejection and request reconsideration. Claim 5 depends from claim 1 and is allowable over Meade along with claim 1 for the reasons mentioned above and on its own merit. The combination of Meade with Chiang also fails to teach or suggest the subject matter of claim 1. Therefore, the rejection of claim 5 should be withdrawn because claim 5 depends from claim 1.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meade in view of Masuda et al. (U.S. Patent No. 5,475,473). Applicants respectfully traverse the rejection and request reconsideration. Claims 5 and 6 depend from claim 1 and are allowable over Meade along with claim 1 for the reasons mentioned above and on their own merit. The combination of Meade with Masuda also fails to teach or suggest the subject matter of claim 1. Therefore, the rejection of claims 5 and 6 should be withdrawn because claims 5 and 6 depend from claim 1.

Claims 7, 8, 26, 27, 37 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meade in view of Till et al. (U.S. Patent No. 6,006,059). Applicants respectfully traverse the rejection and request reconsideration.

Claims 7 and 8 depend from claim 1, claims 26 and 27 depend from claim 25, claims 37 and 38 depend from claim 36 and are allowable over Meade along with claims 1, 25 and 36 for the reasons mentioned above and on their own merit. The combination of Meade with Till also fails to teach or suggest the subject matter of claims 1, 25 and 36. Therefore, the rejection of claims 7, 8, 26, 27, 37 and 38 should be withdrawn because they depend from claims 1, 25 and 36, respectively.

Claims 18, 32 and 43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over

Meade. Applicants respectfully traverse the rejection and request reconsideration. Claim 18 depends from claim 13, claim 32 depends from claim 25, claim 43 depends from claim 36 and are allowable over Meade along with claims 1, 25 and 36, respectively, for the reasons mentioned above and on its own merit. Therefore, the rejection of claims 18, 32 and 43 should be withdrawn.

Claims 33 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meade in view of Hanson et al. (U.S. Patent No. 4,909,182). Applicants respectfully traverse the rejection and request reconsideration.


Claim 33 depends from claim 25. Claim 44 depends from claim 36. Claims 33 and 44 are allowable over Meade along with claims 25 and 36, respectively, for the reasons mentioned above and on their own merit. The combination of Meade with Hanson also fails to teach or suggest the subject matter of claims 25 and 36. Therefore, the rejection of claims 33 and 44 should be withdrawn because they depend from claims 25 and 36, respectively.

Claims 35 and 46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meade in view of Illman et al. (U.S. Patent No. 3,990,132). Applicants respectfully traverse the rejection and request reconsideration.

Claim 35 depends from claim 25. Claim 46 depends from claim 36. Claims 35 and 46 are allowable over Meade along with claims 25 and 36, respectively, for the reasons mentioned above and on their own merit. The combination of Meade with Illman also fails to teach or suggest the subject matter of claims 25 and 36. Therefore, the rejection of claims 35 and 46 should be withdrawn because they depend from claims 25 and 36, respectively.

In view of the foregoing, the present patent application is now deemed to be in condition for allowance. Applicants therefore respectfully request formal allowance of the application. If the Examiner believes further discussion of any issue would expedite allowance, the Examiner is encouraged to telephone Applicants' undersigned representative.

Respectfully submitted,
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